www.medscape.com Alcohol-Related Deaths Continue to Climb Deborah Brauser January 23, 2014

Alcohol consumption directly led to nearly 80,000 deaths per year in 16 North American and Latin American countries between 2007 and 2009, according to new research.

A population study of more than 230,000 deaths showed that the countries with the highest mortality rates that were fully related to alcohol consumption were El Salvador, Guatemala, and Nicaragua.

In addition, 86% of the overall deaths occurred in men. In fact, the rate of deaths from alcohol consumption was 28 times higher for men than for women in El Salvador.

Although the risk for all men in the United States and Canada was only 3 times greater than for women, the risk was higher for those between the ages of 50 and 69 years.

"The mortality rates found in this study reveal the tip of the iceberg of a broader problem," investigators led by Vilma Pinheiro Gawryszewski, from the Health Analysis and Information Unit at the Pan American Health Organization (PAHO) in Washington, DC, write.

The researchers note that previous research has shown a link between alcohol use and numerous other conditions, including heart disease, diabetes, tuberculosis, and psychiatric disorders.

"Our study simply shows how many deaths are wholly attributable to alcohol consumption. The number for which [it] is a significant contribution factor is likely to be much higher," they add in a release.

The study was published online January 14 in Addiction.

Big Problem

According to the investigators, individuals older than 15 years in the Americas average 8.7 liters of pure alcohol each year vs the global average of 6.1 liters per year.

"Countries of the Americas experience a problem of higher magnitude than the global average," they write, adding that the 2010 Global Burden of Diseases reported that the top risk factor across all age groups in El Salvador, Guatemala, and Ecuador was alcohol use.

For this study, the researchers examined PAHO mortality database records from 2007 and 2009 for 238,367 individuals who lived in 16 countries in North, Central, and South America.

Results showed an annual average of 79,456 mortality cases in which death "would not have occurred in the absence of alcohol consumption." Of these, 63% were attributed to liver disease, and 32% were attributed to neuropsychiatric disorders.

In addition, liver disease was the leading cause of this type of death in all countries except Guatemala and Nicaragua, where neuropsychiatric disorders were the leading cause.

However, "these differences might be related to variations in diagnostic accuracy and coding practices," write the investigators.

The highest age-adjusted mortality rates were found in El Salvador, with 27.4 out of 100,000 deaths per year. This was followed by rates of 22.3 in Guatemala, 21.3 in Nicaragua, and 17.8 in Mexico.

The rates in Canada and the United States were 5.7 and 6.7, respectively. Colombia had the lowest rate, at just 1.8.

Sex Differences

Although the alcohol-related deaths occurred in significantly more men than women, the ratio between the sexes varied widely among the countries assessed.

Men in Nicaragua were 18.9 times more likely than women to die directly from alcohol consumption, and men in Cuba were 14.8 times more likely than women to die this way.

The countries with the lowest sex discrepancy in mortality risk were the United States and Canada, where men's risk was 3.2 times higher than for women.

When examining age groups, those between the ages of 40 and 59 years represented 55% of the total deaths. However, the highest mortality rates in the United States, Canada, Argentina, Costa Rica, Cuba, and Paraguay were for those between the ages of 50 and 69 years.

Increased mortality rates were found in individuals from Brazil, Ecuador, and Venezuela between the ages of 40 and 49 years; these rates became stable until the age of 70 and then decreased sharply.

On the other hand, mortality risk increased steadily throughout life in Mexico before peaking at the age of 70.

Finally, the risk rate increased starting at age 30 in El Salvador, Guatemala, and Nicaragua — the 3 countries with the highest overall alcohol-related mortality rates.

"This study does not intend to measure the whole impact or burden of alcohol consumption, which will need other factors or variables," write the researchers.

However, they note that mortality data from codes "where alcohol is a necessary cause" are important for identifying and monitoring alcohol consumption within a specific country.

"As these high rates have shown a major public health problem, countries should increase their efforts to improve the quality of information...and implement more effective policies to reduce alcohol availability and consumption at national levels," they conclude.

The study authors have reported no relevant financial relationships.

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